

XV.—*Notes on the Tortoises of the 'Zoology of Mexico' of MM. A. Duméril and Bocourt.* By Dr. J. E. GRAY, F.R.S. &c.

THIS is a part of the zoological researches of the scientific expedition to Mexico and Central America, published under the direction of M. Milne-Edwards, entitled, "Etudes sur les Reptiles et les Batraciens, par M. Auguste Duméril, Membre de l'Institut, et M. Bocourt, Naturaliste-voyageur, Membre de la commission scientifique de Mexique." The work seems to have been stopped by the Revolution; for this livraison appeared in 1870, and I have not seen any since.

This part contains 10 plates, marked i.-xii., the eighth and tenth not being published. The text only refers to the Chelonians, with the exception of a few pages about crocodiles; so I shall confine my observations to the Chelonians.

The work is written in a very slight and popular style; and the illustrations are more decorative than accurate, the figures appearing to be very much embellished. Indeed the descriptions are of the most prominent characters only, and far behind our knowledge of the structure of the Chelonians—no details of the skulls, or the palates, or the development of the sternum being given, which would at once have enabled us to ascertain the smaller groups to which the species belong, to determine easily their proper relations, and to be certain whether they are correctly identified.

Indeed the whole work is a lamentable exhibition of the very backward state of zoological science in the French capital; the principal part of it seems to be merely the production of probably an excellent collector of animals in foreign countries, but who has had no preliminary education.

Like many other zoological works of late years published in France, it is in great part a mere compilation by a "prentice hand," which often shows great industry but no zoological talent. It seems to be the system now for such works to be composed by a person who is taken from the zoological laboratory and sent out to collect, or desired to study the collections and works on a given subject, and write the best he can upon it, and publish it, generally in conjunction with the name of a Member of the Institute, who writes a few pages, differing in number according to his leisure or inclination, puts their two names in the title, and, if I have not been very incorrectly informed, takes the lion's share of "honorarium" paid for the preparation of the work.

1. *Emys incisa*, Duméril and Bocourt, *l.c.* p. 11, t. i. & ii.

From the mountains of Conchavona, in the province of La Union, one of the ports of Salvador on the Pacific. The inhabitants say it is never found in water.

It appears to be an *Emys*; but the head is so indistinctly figured that it is impossible to determine what modern genus or species it may belong to.

2. *Emys areolata*, Dum. Arch. du Mus. 1852, tome vi. p. 223, t. xiv.; Bocourt, *l.c.* p. 13.

*Cholapus areolatus*, Cope, Proc. Acad. Nat. Sci. Philad. 1866, p. 123.

M. Bocourt observes that fig. 1 in the plate cited represents more plates than the species possesses, the artist being apparently misled by the irregularity in one side of the carapace.

In the 'Supplement to the Catalogue of Shield Reptiles,' p. 42, I observed that this species was probably a variety of *Malaclemmys concentrica*. The examination of the palate, which would at once settle this question, is not noted in MM. Duméril and Bocourt's essay, but the species is left in that magazine of incongruous species called *Emys* by these authors.

3. *Emys venusta*, Gray, Cat. Sh. Rept. 1855, p. 24, t. xii. *a*; Bocourt, *l.c.* p. 13.

He refers to a peculiarity in the genito-urinal organs described by Vautherin, Ann. Sci. Nat. ser. 5, p. 12.

4. *Emys Grayi*, Dum. & Bocourt, *l.c.* p. 13, t. iii. f. 2, 2 *a*.

This species is described as allied to, but different from, *Emys ornata*, Bell, MSS.; Dum. & Bibr. Erp. Gén. t. ii. p. 286; Gray, Cat. Sh. Rept. p. 24, t. xii.; Bocourt, *l.c.* t. iii. f. 1 & 1 *a*, figured from a specimen presented by Mr. Bell to the French Museum. *E. Grayi* is found on the east coast of Guatemala, at the mouth of the Nagualate.

I believe that this species is the same as *Callichelys concinna*, Gray, Ann. & Mag. Nat. Hist. 1873, x. p. 148; Hand-list Sh. Rept. p. 48\*. Described from two specimens received from Tehuantepec, San Mateo.

This species has nothing to do with *Emys Grayi* of Günther, P. Z. S. 1869, p. 504, t. 38, from Bussora (*Emmenia Grayi*, Gray, Suppl. Cat. Sh. Rept. p. 38, and Hand-list Sh. Rept. p. 36).

\* In the 'Hand-list of Shield Reptiles,' p. 48, the name accidentally dropped out in making up the pages, and the specimens are referred to as belonging to *C. callirostris*.

5. "*Emys pulcherrima*, Gray," Dum. & Bocourt, *l. c.*  
p. 15, t. vii. figs. 1, 1 a, & 1 b.

This they regard as "the adult of the *E. pulcherrima*, Gray, Cat. Sh. Rept. B. M. 1855, t. xxv. fig. 1 (young)."

It is described from a specimen said to have come from Central America, which is living in the Menagerie of Reptiles.

Only the external form and the colouring of the upper part of the animal is figured; and the description is so general that it is impossible to determine to what subgenus this species should be referred; and I greatly doubt its being the adult of my *Emys pulcherrima* (from the colouring of the head, neck, and feet), which is, by the structure of its sternum, a *Rhinoclemmys*. The species described by Duméril and Bocourt, from the shortness of the toes and the form of the streaks on the head, may belong to the same genus. If it does, it is quite a new species, characterized by the streaks of the head and the broad orange streaks edged with black on the fore legs, which separate it from all the species of *Rhinoclemmys* known. I therefore propose to call it *Rhinoclemmys Bocourti*. The colouring of the shell is somewhat like that of, but very different from, *R. mexicana*.

6. *Emys marmorata*, Baird & Girard, Proc. Acad. Nat. Sci. Philad. vi. 1852, p. 177.

MM. Duméril and Bocourt observe that there are two specimens of this species in the French Museum from the province of San Francisco, California, sent by Professor Agassiz; but their description adds nothing to our knowledge of this species; they give the account of the synonyma compiled for Mr. Agassiz, which I believe contains two very different animals confused together.

Mr. Girard's figure very much resembles the animal which I described in 1855, from a specimen I purchased at Nantes, under the name of *Emys olivacea*, Cat. Sh. Rept. p. 30, t. xii. c, and which I now call *Redamia olivacea*; and the truth of this suspicion might have been confirmed if MM. Duméril and Bocourt had given us the details of its palate.

*Cistudo mexicana*, Gray; Duméril & Bocourt, *l. c.* p. 17, who add nothing new to the account of this species; indeed it appears doubtful whether the authors had ever seen a specimen.

- Dermatemys Mawii*, Gray; Duméril & Bocourt, *l. c.* p. 17,  
t. viii. figs. 2, 2a.

They merely observe that this species is found in the fresh

waters of Belize, where it is eaten in the early months of the year, and several specimens were received from Mexico.

They give a very poor figure of the head, from the living animal, which, if correct, has not the black spot on each side of the pupil, so common in American water-tortoises; and this peculiarity is not noticed in the description.

In the synonyma the authors refer *Emys Berardii* of M. A. Duméril, so badly figured in the Arch. du Muséum, 1852, vi. p. 231, t. xv., and *Ptychemys* (i.e. *Ptychemys*) *Berardii* of Agassiz without any doubt as synonyma of this species, which I suppose, settles this question; but the species was so very badly described that it was a matter of great doubt.

*Emysaurus Rossignonii*, Duméril & Bocourt, *l. c.* p. 18,  
t. v. f. 2.

This species, which is established on three young specimens, two from Guatemala and one from Mexico, is distinguished from the young *E. serpentina* from Pennsylvania (which they figure t. v. f. 1) by having four beards, two on each side of the symphysis of the chin, a broader sternum, less-marked cuticular processes on the neck and limbs.

This is a species that has not occurred to me among the many tortoises Mr. Salvin has brought from Guatemala.

CLAUDIUS, Cope, Proc. Acad. Nat. Sci. Philad. 1865.

*Claudius angustatus*, Cope, Proc. Acad. Nat. Sci. Philad. 1865, p. 187; 1869, t. ix.; Duméril & Bocourt, *l. c.* p. 20, t. vi. figs. 1, 2, 3, 4.

*Claudius megalocephalus*, Bocourt, Ann. Sci. Nat. Zool., 1868, x. p. 122.

Described from a single specimen in the Paris Museum, received from Mexico.

This species I have not seen. It is very interesting in the nose not being produced or cylindrical, the chin having two beards, the sternum being acute at each end and covered with four pairs of shields, and the lateral process of the second pectoral plate being slender. The tail is very short and marked with four longitudinal tubercular ridges.

1. *Staurotypus triporcatus*, Wagler; Duméril & Bocourt, *l. c.* p. 21; Gray, Cat. Sh. Rept. t. xx. b.

The authors add nothing to the account of this animal; indeed it is doubtful if they have seen it.

2. *Staurotypus Salvini*, Gray, Duméril & Bocourt, *l. c.* p. 22, t. v. f. 3, 3 a; Gray, *P. Z. S.* 1864, p. 127; 1869, p. 179, fig. 5 (skull); *Suppl. Cat. Sh. Rept.* p. 65.

Received from Vera Paz, Guatemala, one of the affluents of the Polochie.

The figure only represents the underside of the living animal.

I do not see how *Staurotypus marmoratus* of J. von Fischer, from Tejas in Mexico, described and figured in Wiegmann's *Archiv für Naturg.* 1870, p. 265, t. x., differs from this species.

1. *Cinosternon cruentatum*, A. Duméril, *Arch. du Muséum*, 1852, vi. p. 238, t. xvi.

2. *Cinosternon albugulare*, Duméril & Bocourt, *l. c.* p. 24.

The Museum received three specimens from San José, Costa Rica.

3. *Cinosternon leucostomum*, A. Duméril, *Arch. du Muséum*, 1852, vi. p. 239, fig. 17.

4. *Cinosternon hirtipes*, Wagler, *Icon. Amphib.* t. xxx.

The three former are only in the Paris Museum; and the characters separating them seem very doubtful. The last is only known from Wagler's figure. The large number of specimens in the British Museum from different parts of tropical America show that the species of this genus are very liable to vary.

- Chelonia Agassizii*, Duméril & Bocourt, *l. c.* p. 26, t. vi.

Described from a single specimen in the Museum of Paris, taken at the mouth of the Naguale, on the Pacific shores of Guatemala.

From the form of its head-shields, it appears to be a species of the restricted genus *Chelonia*. The authors say it is well distinguished from *Chelonia virgata* by the dorsal disk being more elevated and sloping on each side like a roof, and more elongate and narrowed over the hinder limb, and by the presence of an interoccipital plate on the back of the crown. It may probably be a distinct species, perhaps one of those described by Mr. Girard.

It is very difficult to distinguish species of turtles when they are divided into small groups by the form of the skull, number of head-shields, &c., unless you have a series of specimens showing all the ages of the species; for the bones undergo such a change of form during the development of the animal.

I have just seen Mr. Cope's synopsis of the Chelydrinæ in the 'Proceedings of the Academy of Nat. Sciences of Philadelphia' for 1872, p. 22, which contains some remarks on M. Bocourt's paper. He observes that

1. *Staurotypus Salvinii*, figured by Bocourt, appears to him to be very different from that described by Dr. Gray, and perhaps pertains to another genus. "Dr. Gray describes the anterior lobe of the sternum in *S. Salvinii* as narrowed like the posterior, while it is broadly rounded in this animal." Mr. Cope forms for this a species, which he names *Claudius pictus*; but he seems to have a doubt if it is distinct from a species which he calls *Claudius severus*, p. 24,—which I think are both the same as *Stauromys Salvinii*.

Mr. Cope's paper induces me to believe that the first section of his genus *Claudius* is synonymous with my genus *Stauromys*, which differs from *Claudius* in having a broader sternal costal process and a distinct inguinal.

2. *Claudius angustatus*, Cope. He seems to consider that his species is different from that figured by M. Bocourt, and is inclined to think that Bocourt was right when he named it *megalcephalus* in 1868, though he afterwards gave it up, believing it to be the same as Cope's. From these observations it would appear as if the genus *Claudius* ought to be confined to this species, peculiar for having a very narrow costal lateral lobe and only a single or no inguinal shield.

XVI.—Answer to Dr. Stoliczka's "Notes on the Indian Species of *Thelyphonus*." By A. G. BUTLER, F.L.S., F.Z.S., &c.

DR. STOLICZKA has just forwarded to me a paper recently read before the Asiatic Society of Bengal, containing a criticism of my monograph of *Thelyphonus* (Ann. & Mag. Nat. Hist. ser. 4, vol. x. pp. 200–206), and supplemented by descriptions of several new species.

It is unfortunate that the author did not acquaint me with his intention to describe new Indian *Thelyphoni*, as I should willingly have deferred the publication of my own paper (Cist. Ent. vi. pp. 129–132) until his descriptions had appeared, and thus avoided adding to the synonymy of the genus. As it is, there can be little doubt that my paper has priority, since it was before the public on May 1, whereas the separate copies even of Dr. Stoliczka's paper appear not to have reached the author much before the middle of that month, the one forwarded to me having left Calcutta on the 15th.